APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,605	03/01/2004	J.L. (Jen-Lin) Chao	67,200-1132	2044

7590   06/25/2009

TUNG & ASSOCIATES
Suite 120
838 W. Long Lake Road
Bloomfield Hills, MI 48302

EXAMINER
MILLER, ALAN S

ART UNIT	PAPER NUMBER
3624	

MAIL DATE	DELIVERY MODE
06/25/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/791,605	CHAO ET AL.
	Examiner	**Art Unit**	
	ALAN MILLER	3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _16 March 2009_.
2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-5, 8, 9 and 20 -22_ is/are pending in the application.
     4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1-5, 8, 9 and 20 -22_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
     a) ☐ All   b) ☐ Some * c) ☐ None of:
        1. ☐ Certified copies of the priority documents have been received.
        2. ☐ Certified copies of the priority documents have been received in Application No. _____.
        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   This action is in response amendment filed 3/16/2009, in regards to the application filed

3/1/2004.

        Claims 1-5, 8, 9 and 20 -22 are pending and have been examined, claims 10- 19 have

been previously withdrawn, claims 6 and 7 have been cancelled and claims 20-22 have been

added in the most recent amendment.

        This action has been made Final.

Response to Arguments

2.   Applicant's arguments with respect to claims 1-5, 8, and 9 have been considered but are

moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making
> and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it
> pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode
> contemplated by the inventor of carrying out his invention.

4.   Claims **1-5, 8, 9 and 20 -22** are rejected under 35 U.S.C. 112, first paragraph, as failing

to comply with the written description requirement. The claim(s) contains subject matter which

was not described in the specification in such a way as to reasonably convey to one skilled in the

relevant art that the inventor(s), at the time the application was filed, had possession of the

claimed invention. Claim 1 recites "comparing an actual shipping date to said plurality of

modified shipping date forecasts to determine a relative accuracy value of said baseline and said second recovery trend parameters", however, Examiner is not able to find any support in Applicant's specification regarding "a relative accuracy value". Claim 1 further recites "performing regression analysis on said relative accuracy values to determine an optimal recovery trend parameter", however, Examiner is not able to find any support regarding "relative accuracy value" nor performing regression analysis on said relative accuracy value to determine an optimal recovery trend parameter.

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6.   Claims **1-5, 8, 9 and 20 -22** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "performing regression analysis on said relative accuracy values to determine an optimal recovery trend parameter", however, it is unclear how performing regression analysis, which determines a best fit function for data points, determines an optimal parameter. Clarification or correction is requested.

Claim 1 recites the limitation "the recovery trend parameter" in lines 6 and 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "said first recovery trend parameter" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the recovery trend parameter". There is insufficient antecedent basis for this limitation in the claim.

Claim 20 recites the limitation "said accuracy value". There is insufficient antecedent basis for this limitation in the claim.

Claim 20 further recites "generating a curve comprising a plot of said accuracy value". It is unclear how a single value can be plotted and a curve then generated. Clarification or correction is requested.

Claim 21 recites the limitation "point on said curve" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 22 recites the limitation "slope of said curve" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

7.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8.   Claims **1-5, 8, 9 and 20 -22** are rejected under 35 U.S.C.101. Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to a machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. *In re Bilski et al,* 88 USPQ 2d 1385 CAFC (2008); *Diamond v. Diehr,* 450 U.S. 175, 184 (1981); *Parker v. Flook,* 437 U.S. 584, 588 n.9

(1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88

(1876).

An example of a method claim that would <u>not</u> qualify as a statutory process would be a

claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim

should positively recite the other statutory class (the thing or product) to which it is tied, for

example by identifying the apparatus that accomplishes the method steps, or positively recite the

subject matter that is being transformed, for example by identifying the material that is being

changed to a different state.

Here, in claim 1, applicant's method steps, using, generating, comparing and performing,

fail the first prong of the new Federal Circuit decision since they are not tied to a machine and

can be performed without the use of a particular machine. Further, they fail the second prong of

the Federal Circuit decision as they don't transform underlying subject matter (such as an article

or materials) to a different state or thing. Thus, claims **1-5, 8, 9 and 20 -22** are non-statutory

since they may be performed within the human mind.

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

10.   Claims **1, 2, 4, 5, 8, 9 and 20 -22** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Crosswhite (U.S. 6,611,726).

11.   In respect to claim 1, Crosswhite discloses:

        using previously determined fabrication performance data to develop a baseline recovery

trend parameter, wherein the recovery trend parameter operates to modify a pre-defined

efficiency value of the fabrication facility to generate a an modified shipping date forecast for

fabricated products fabricated within the fabrication facility (see at least column 10, lines 45 –

53, which discloses prior to calculating the forecast, the forecasting method of the present

invention…includes setting initial forecast parameter values based on the historical data (i.e.

using previously determined fabrication performance data to develop a baseline recovery trend

parameter)… these initial settings can be best-guess type estimates from prior forecasting of

similar independent variables (i.e. *wherein the recovery trend parameter operates to modify a*

pre-defined efficiency value). Examiner notes that the pre-defined efficiency value is merely one

parameter based off of prior forecasting. Column 10, lines 45 – 53 further discloses a forecast

using this subset of the data is created (i.e. *to generate a an modified shipping date forecast for*

fabricated products fabricated within the fabrication facility); see also column 2, lines 32 and 33,

which discloses manufacturing organizations).

        In further regards to the claimed limitation "wherein the recovery trend parameter

operates to modify pre-defined efficiency value of the fabrication facility to generate an accurate

push out date for fabricated products fabricated within the fabrication facility", this "wherein"

statement merely recites the result of performing the step of using predetermined performance

data to develop a recovery trend parameter in claim 1, and it has been held that a wherein clause

in a method is not given weight when it simply expresses the intended result of a process step

positively recited ((*Minton v. Nat'l Ass'n of Securities Dealers, Inc.*, 336 F.3d 1373, 1381, 67

USPQ2d 1614, 1620 (Fed. Cir. 2003)). Also, a wherein clause that merely states the result of the

limitations in the claim adds nothing to the patentability or substance of the claim ((*Texas*

Instruments Inc. v. International Trade Commission 26, USPQ2d 1010 (Fed. Cir. 1993); *Griffin*

v. Bertina, 62 USPQ2d 1431 (Fed. Cir. 2002); *Amazon.com Inc. v. Barnesandnoble.com Inc.*, 57

USPQ2d 1747 (CAFC 2001)). Therefore, the claimed "wherein" clause does not differentiate

the claim from the prior art.

Crosswhite further discloses generating a plurality of second recovery trend parameters

based on said first recovery trend parameter to generate a plurality of modified shipping date

forecasts; comparing an actual shipping date to said plurality of modified shipping date forecasts

to determine a relative accuracy value of said baseline and said second recovery trend parameters

(see at least column 12, lines 31 – 59, which discloses select values for the parameters of the

time series forecasting method; b. Select values for the parameters of the time series forecast

model; c. Select an error measure as the metric to evaluate the "best" solution; d. For each time

period of actual (historical) data: i. Determine the forecasting equation from the actual

(historical) data to this point. ii. Using the forecasting equation the forecast the desired number

of periods into the future. iii. As long as actual (historical) data exists for "n" periods beyond the

current point, determine the error as the difference between the extrapolated forecast and the

actual data for the future period. The expression for the individual error term is the value

(Forecast $_{i+n}$+,-Actual $_{i+n}$) which is the difference between the Forecast from actual (historical)

data through time period "i", forecasting "n" periods ahead to time period "i+n and the Actual

(historical) data at time period "i+n." (i.e. *comparing actual shipping date to forecasts to*

determine a relative accuracy value of said baseline trend parameter). iv. Accumulate the error

and repeat this procedure, adding more data to the forecasting equation. Determine the error

statistic or likelihood estimate from these terms. f. Adjust the parameters of the time series

forecasting (i.e. *generating a plurality of second recovery trend parameters based on said first*

recovery trend parameter to generate a plurality of modified shipping date forecasts); g. Repeat

steps (d) through (f) until the metric is equal to or substantially equal to the optimal (i.e.

comparing an actual shipping date to said plurality of modified shipping date forecasts to

determine a relative accuracy value of said baseline and said second recovery trend

parameters). Examiner notes that buy modifying the parameters, based off the first parameters, it

generates a plurality of second recovery trend parameters to generate a plurality of forecasts.

Examiner further notes that for each forecast, the initial and subsequent, a relative accuracy value

is determined for each (e.g. Determine the error statistic or likelihood estimate from these

terms)).

      Crosswhite discloses the error terms are accumulated, and further discloses performing

an iterative process on the error values to determine optimal parameters (i.e. *an optimal recovery*

trend parameter) to make future forecasts (see at least column 12, lines 9 – 24).

      Crosswhite does not explicitly disclose performing regression analysis to determine

optimal parameters.

      Examiner notes that performing regression analysis to determine a function from multiple

parameters is old and well known (see at least column 7, lines 34 - 38, 51—53).

It would have been obvious to one of ordinary skill in the art to include in the iterative process on the accumulated error values of Crosswhite the old and well known performing regression analysis on multiple parameters since the claimed invention is merely a combination of old elements, and one of ordinary skill in the art would have recognized that it would produce a predictable result of finding a function that best matches the accumulated error terms to perform further analysis.

12.   In respect to claim **2**, Crosswhite discloses wherein the recovery trend parameter is updated periodically (see at least column 8, lines 27 - 30, which discloses the present system and method for calculating time series forecasting parameters involving looking forward to improve forecasting accuracy for supply chain needs beyond the next, immediate time period; and see column 10, lines 45 - 54, which discloses prior to each forecast, initial forecast parameters are set. Examiner notes, that since the forecast is done for each time period beyond the next, immediate time period, the parameters are updated every time a new forecast for a new time period is determined (i.e. *wherein the recovery trend parameter is updated periodically*)).

13.   In respect to claim **4**, Crosswhite discloses an object of the present invention is to permit better decisions for the scheduling of manufacturing processes.

Crosswhite does not explicitly disclose wherein the fabrication facility is a wafer fabrication facility, and wherein the products fabricated are wafers disposed within a plurality of wafer lots.

Examiner notes that it is old and well known that wafer fabrication facilities are manufacturing facilities.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include in the manufacturing facilities disclosed by Crosswhite, a wafer fabrication facility since a wafer fabrication facility is a type of manufacturing facility and since the type of facility in which the process is intended to be used does not functionally affect the steps of using.

14.   In respect to claim **5**, Crosswhite discloses initial settings (i.e. *baseline recovery trend parameter*) can be randomly generated numbers, can be set in the middle of the parameter range of values or best guess-type estimates from prior forecasting of similar independent variables and processes.

Crosswhite does not expliclity disclose wherein the baseline recovery trend parameter equals a number of recovery days divided by the sum of a number of remaining days plus the number of recovery days, wherein the recovery days are a number of additional days needed to process a lot beyond an originally forecasted shipping date, and wherein the remaining days are the number of days between a current date of processing a lot within an order and an originally forecasted shipping date.

However, it would have been obvious to one of ordinary skill to substitute one parameter with any other paramter since it has been held that express suggestion to substitute one equivalent technique for another need not be present to render such substitution obvious (*In re Fout*, 213 USPQ 532 (CCPA 1982), In re Siebentritt, 152 USPQ 618 (CCPA 1967)).

15.   In respect to claim **8**, Crosswhite discloses adjusting the parameters (i.e. *plurality of*

second recovery trend parameters) of the time series forecasting method (see at least column 12,

lines 56 – 57).

Crosswhite does not explicitly discloses wherein said plurality of second recovery trend

parameters is generated-by adding at least one multiple of a constant factor to the baseline

recovery trend parameter.

Examiner notes that it is old and well known to modify parameters by adding a multiple

of a constant factor.

It would have been obvious to one of ordinary skill in the art to include in the adjusting of

parameters of Crosswhite the old and well known modifying of parameters by adding a multiple

of a constant factor, since the claimed invention is merely a combination of old elements, and

one of ordinary skill in the art would have recognized that it would produce a predictable result,

and since it has been held that express suggestion to substitute one equivalent technique for

another need not be present to render such substitution obvious (*In re Fout*, 213 USPQ 532

(CCPA 1982), In re Siebentritt, 152 USPQ 618 (CCPA 1967)).

16.   In respect to claim **9**, Crosswhite discloses adjusting the parameters (i.e. *plurality of*

second recovery trend parameters) of the time series forecasting method (see at least column 12,

lines 56 – 57)

Crosswhite does not explicitly discloses wherein said plurality of second recovery trend parameters is generated by adjusting the baseline recovery trend parameter by statistical sigma variation of said baseline recovery trend parameter.

Examiner notes that standard deviation or statistical sigma variations are old and well known.

It would have been obvious to one of ordinary skill in the art to include in the adjusting of parameters of Crosswhite the old and well known standard deviation of the first parameter, since the claimed invention is merely a combination of old elements and one of ordinary skill in the art would have recognized that it would produce a predictable result, and since it has been held that express suggestion to substitute one equivalent technique for another need not be present to render such substitution obvious (*In re Fout*, 213 USPQ 532 (CCPA 1982), In re Siebentritt, 152 USPQ 618 (CCPA 1967)).

17.   In respect to claim **20**, Crosswhite discloses the expression for the individual error term is the value (Forecast $_{i+n}$+,-Actual $_{i+n}$) which is the difference between the Forecast from actual (historical) data through time period "i", forecasting "n" periods ahead to time period "i+n and the Actual (historical) data at time period "i+n." (i.e. *comparing actual shipping date to forecasts to determine a relative accuracy value of said baseline trend parameter*). iv. Accumulate the error and repeat this procedure, adding more data to the forecasting equation. Determine the error statistic or likelihood estimate from these terms. f. Adjust the parameters of the time series forecasting (i.e. *generating a plurality of second recovery trend parameters based on said first*

recovery trend parameter to generate a plurality of modified shipping date forecasts) and

repeating the steps until the metric is equal to the optimal (see at least column 12, lines 31 - 60).

Crosswhite does not explicitly disclose wherein said step of comparing comprises

generating a curve comprising a plot of said accuracy value of said baseline versus said second

recovery trend parameters.

Examiner notes that plotting data points on a graph and generating a curve is old and well

known.

It would have been obvious to one of ordinary skill in the art to include in the

determining of error terms and repeating the steps until the metric is equal to the optimal of

Crosswhite the old and well known plotting data points on a graph and generating a curve since

the claimed invention is merely a combination of old elements, and one of ordinary skill in the

art would have recognized that it would produce a predictable result of having a visual

representation of the error statistics in order to better determine the optimal parameters.

18.   In respect to claim **21**, Crosswhite discloses the expression for the individual error term is

the value (Forecast $_{i+n}$+,-Actual $_{i+n}$) which is the difference between the Forecast from actual

(historical) data through time period "i", forecasting "n" periods ahead to time period "i+n and

the Actual (historical) data at time period "i+n." (i.e. *comparing actual shipping date to forecasts*

to determine a relative accuracy value of said baseline trend parameter). iv. Accumulate the

error and repeat this procedure, adding more data to the forecasting equation. Determine the error

statistic or likelihood estimate from these terms. f. Adjust the parameters of the time series

forecasting (i.e. *generating a plurality of second recovery trend parameters based on said first*

recovery trend parameter to generate a plurality of modified shipping date forecasts) and

repeating the steps until the metric is equal to the optimal (see at least column 12, lines 31 - 60).

Crosswhite does not explicitly disclose wherein said optimal recovery trend parameter is

determined by selecting a maximum accuracy point on said curve.

Examiner notes that it is old and well known to find a maximum point on a curve.

It would have been obvious to one of ordinary skill in the art to include in the

determining of error terms and repeating the steps until the metric is equal to the optimal of

Crosswhite the old and well known plotting data points on a graph, generating a curve, and

finding a maximum point on the curve since the claimed invention is merely a combination of

old elements, and one of ordinary skill in the art would have recognized that it would produce a

predictable result of having a determining the parameters that create the optimal forecast by

choosing a maximum on a graph.

19.   In respect to claim **22**, Crosswhite discloses the expression for the individual error term is

the value (Forecast $_{i+n}$+,-Actual $_{i+n}$) which is the difference between the Forecast from actual

(historical) data through time period "i", forecasting "n" periods ahead to time period "i+n and

the Actual (historical) data at time period "i+n." (i.e. *comparing actual shipping date to forecasts*

to determine a relative accuracy value of said baseline trend parameter). iv. Accumulate the

error and repeat this procedure, adding more data to the forecasting equation. Determine the error

statistic or likelihood estimate from these terms. f. Adjust the parameters of the time series

forecasting (i.e. *generating a plurality of second recovery trend parameters based on said first*

recovery trend parameter to generate a plurality of modified shipping date forecasts) and

repeating the steps until the metric is equal to the optimal (see at least column 12, lines 31 - 60).

Crosswhite does not explicitly disclose wherein said optimal recovery trend parameter is

determined by determining a slope of said curve.

Examiner notes that it is old and well known to find a maximum point on a curve via the

slope.

It would have been obvious to one of ordinary skill in the art to include in the

determining of error terms and repeating the steps until the metric is equal to the optimal of

Crosswhite the old and well known plotting data points on a graph, generating a curve, and

finding a maximum point on the curve via the slope since the claimed invention is merely a

combination of old elements, and one of ordinary skill in the art would have recognized that it

would produce a predictable result of having a determining the parameters that create the optimal

forecast by choosing a maximum on a graph.

20.   Claim **3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Crosswhite (U.S.

6,611,726) in view of Shipman (U.S. 5,819,232).

In respect to claim **3**, Crosswhite discloses initial settings can be best-guess type estimates from

prior forecasting of similar independent variables (see at least column 10, lines 45 - 55)

Crosswhite does not explicitly disclose, however, Shipman discloses wherein the pre-

defined efficiency value of the fabrication facility is a turn rate, wherein the turn rate equals a

ratio of actual products to forecasted products fabricated within the fabrication facility (see at

least column 6, lines 55-64, wherein Shipman discloses mean average deviation (MAD) (*i.e. turn*

rate) is determined by taking the difference between the forecast for each interval in the first

history period and the actual shipping data for each interval, adding the absolute values of these

differences then dividing the sum of these differences by the sum of the actual shipments (*i.e. a*

ratio of actual products to forecasted products fabricated)); FIG. 3B)

It would have been obvious to one of ordinary skill in the art to include in the best-guess

type estimates from prior forecasting of Crosswhite the mean average deviation as taught by

Shipman since the claimed invention is merely a combination of old elements, and one of

ordinary skill in the art would have recognized that it would produce a predictable result of using

prior mean average deviation data as a parameter for a future forecast.

Conclusion

21.   The prior art made of record and not relied upon considered pertinent to Applicant's

disclosure.

    a.   Introduction to Regression Analysis (http://web.archive.org/web/20030212172152/nlreg.com/intro.htm)

discloses old and well known regression analysis.

    b.   Intermediate Algebra Tutorial

(http://web.archive.org/web/20040203202147/http://www.wtamu.edu/academic/anns/mps/math/mathlab/int_algebra/int_alg_tut12_gr

aph.htm) discloses old and well known plotting points on a graph and generating a curve.

    c.   Wolfram MathWorld Second derivative test

(http://mathworld.wolfram.com/SecondDerivativeTest.html) discloses old and well known finding

maximums on a curve.

d.   Shipman et al. (U.S. 5,819,232) discloses old and well known to modify

parameters by adding a multiple of a constant factor, and further discloses old and well

known standard deviation.

e.   Huang et al. (U.S. Patent 5,953,707) discloses using standard deviation in the

management of a supply chain.

f.   Jenkins et al. (U.S. Patent Pub. 2002/0188499) discloses using a standard

deviation in calculating of statistical safety stock.

g.   Chin et al. (U.S. Patent 5,818,716) discloses turn rates and a wherein a fabrication

facility is a wafer fabrication facility.

22.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALAN MILLER whose telephone number is (571)270-5288. The examiner can normally be reached on Mon - Fri, 10:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BRADLEY BAYAT can be reached on (571) 272-6704. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. M./
Examiner, Art Unit 3624

/Bradley B Bayat/

Supervisory Patent Examiner, Art Unit 3624